

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
12 May 2005 (12.05.2005)

PCT

(10) International Publication Number  
**WO 2005/041895 A2**

- (51) International Patent Classification<sup>7</sup>: **A61K**
- (21) International Application Number:  
PCT/US2004/036437
- (22) International Filing Date:  
3 November 2004 (03.11.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
60/516,311 3 November 2003 (03.11.2003) US
- (63) Related by continuation (CON) or continuation-in-part (CIP) to earlier application:  
US 60/516,311 (CON)  
Filed on 3 November 2003 (03.11.2003)
- (71) Applicant (for all designated States except US): **NEW CENTURY PHARMACEUTICALS, INC.** [US/US]; 895 Martin Road, Huntsville, AL 35824 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **CARTER, Daniel, C.** [US/US]; 31341 Heatherhill Circle, Huntsville, AL 35802 (US). **HO, Joseph** [US/US]; 105 Wood Creek Drive, Madison, AL 35758-6310 (US). **WANG, Zhong-min** [US/US]; 107 Murry Drive, Madison, AL 35758-7665 (US).
- (74) Agents: **SCHULMAN, B., Aaron et al.**; Stites & Harbison PLLC, 1199 North Fairfax Street, Suite 900, Alexandria, VA 22314 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US (patent), UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:  
— without international search report and to be republished upon receipt of that report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ALBUMIN BINDING SITES FOR EVALUATING DRUG INTERACTIONS AND METHODS OF EVALUATING OR DESIGNING DRUGS BASED ON THEIR ALBUMIN BINDING PROPERTIES

(57) Abstract: A method is provided for evaluating drug compounds based on their binding properties to human serum albumin wherein structural information at particular albumin binding regions is entered into a computer database and assessed with regard to particular contacting binding residues located in accordance with the invention. The information obtained through the computer database is thus useful in assessing and predicting drug interactions at albumin binding sites. Further, protein fragments including one or more albumin binding sites are provided which can be used in methods of assessing and designing drugs.

WO 2005/041895 A2